



8 X 22 DIGITAL CAMERA BINOCULAR

Model 91956

ASSEMBLY & OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

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For technical questions and replacement parts please call 1-800-444-3353.

THANK YOU for choosing a **HARBOR FREIGHT TOOLS** product. For future reference, please complete the owner's record below:

Model _____ **Serial No.** _____ **Purchase Date** _____

SAVE THE RECEIPT, WARRANTY AND THESE INSTRUCTIONS. It is important that you read the entire manual to become familiar with the unit BEFORE you begin assembly.

The 8 x 22 Digital Camera Binocular is an integrated Binocular and Digital Camera complete with hardware and software to view and save images on your computer.

Technical Specifications

Overall Dimensions:	4-3/16" W x 4-5/8" L x 2" H
Power Source:	2 AAA Cell Alkaline Batteries
Field of View:	122 Ft. at 1,000 Yds.
Angular Field:	7°
Objective Lens:	22 mm
Eye PC Diameter:	12 mm
Digital Camera Resolution:	640 x 480
Resolution:	0.3 Megapixels
Sensor:	CMOS
Memory:	8 MB SDRAM
Focus Range:	10 mm to infinity
System Requirements:	Windows® 98/98SE/2000/2000ME/2000XP, 336 MHz Processor or better, 600 MB free hard disk space, Video card with 2 MB RAM, 16-bit display
Accessories Included:	(1) Black Nylon Belt Pouch, (1) Nylon Neck Strap, (1) 4' 10" USB Cord, (1) Optical Cleaning Cloth, (1) CD-ROM



READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT!
Safety Warnings and Precautions

WARNING: When using product, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this product!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Keep work area well lighted.
3. **Store idle equipment.** When not in use, products must be stored in a dry location to inhibit damage from moisture and salt air.
4. **Check for damaged parts.** Before using any product, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for any broken or damaged parts and any other conditions that may affect its operation. Replace or repair damaged or worn parts immediately.
5. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty.
6. **Keep children away.** Children must never be allowed in the work area. Do not let them handle the Digital Camera Binocular.

7. **Remove batteries if the Digital Camera Binocular is not used for a long period of time.**
8. **Never look at the sun through the binocular/camera. This will result in serious damage to your eyes.**

Your Digital Camera Binocular comes completely assembled. It is important that you read the entire manual to become familiar with the product BEFORE you use the Digital Camera Binocular. Before using the Digital Camera Binocular be sure that you have all parts described in the Parts List and Assembly Diagram located on the last pages of this manual.

The 8 x 22 Digital Camera Binocular has some terrific features. The 8 x 22 Digital Camera Binocular allows you to:

- Shoot pictures without film
- Shoot video
- Transfer photos and video to your PC to edit, create, change and store.
- Shoot up to 35 seconds of video

The following pages in this owner's manual will show you how to use the camera's features:

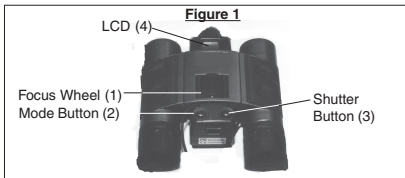
- two (2) resolution modes-
High (H) - VGA resolution for up to 75 pictures and
Low (LO) - QVGA resolution for up to 300 pictures
- Video mode
- Self-timer for video and photos
- Fixed focus
- USB Port

In order to use a computer with the Digital Camera Binocular the computer must run Windows[®] 98 / 98SE / Windows[®] ME/ Windows[®] 2000 or Windows[®] XP. The computer must have a 336 MHz processor or faster. The computer must have a CD-ROM drive, 64 MB of RAM, an available USB port, 600 MB of free hard drive space. You also must have a Video card with 2 MB of RAM minimum 16 bit display. None of the products mentioned here are included with the Digital Camera Binocular.

Using the Binoculars

Hold the Binocular up to both eyes so that both are looking through the lenses. With one hand on each of the barrels, move the barrels up or down to adjust the distance between them, until you are seeing one complete and normal looking view through both the Binocular lenses-see Figure 1.

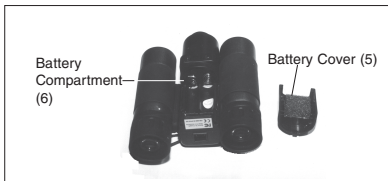
To focus the Binocular, select an object about 15 feet away. Look through the lenses with both eyes. Turn the Focus Wheel (1) until the object appears in focus. Closing your left eye, view the object through your right eye. To make fine changes, turn the right Eyepiece until the object appears clear-see Figure 1.



Closing your right eye, view the object through your left eye. To make fine changes, turn the left Eyepiece until the object appears in clear focus-see Figure 1.

Using the Camera

The Digital Camera will not run without two "AAA" Alkaline batteries. To insert the two "AAA" batteries into the camera you must first remove the Battery Cover (5). Grasp the Battery Cover (5) pull and slide it out then pull it straight up to remove it-see Figure 2.

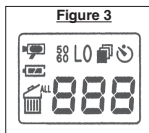


Insert the batteries so that the poles face the direction illustrated in the Battery Compartment (6).

Selecting the Desired Mode

Pressing the Mode Button (2) will cycle you through each function of the Digital Camera. The LCD display will highlight the icon for each Mode selected. Once you land on the desired MODE, press the Shutter Button (3) to select the Mode. Press the Shutter Button (3) to take the photo.

The following is the LCD display that appears on your camera-see Figure 3. Located below are the LCD icons and their explanation.







Self Timer: Use the Self Timer to allow for a time delay before the camera automatically takes a picture.

What to do:

Focus the camera on what you want to take the picture of. If a self -portrait, focus the camera on the spot where you plan to stand. Set the LCD display to Self Timer. Press the Shutter Button. The camera will beep for about 10 seconds allowing you time to get ready. The camera will delay a few seconds and then snap a picture.

If at any time you want to stop the Self-Timer from engaging, press the Shutter Button within the 10 second countdown.

 What to do:	<p>Continuous Snap Shot: Use the Continuous Snap Shot feature if you need to take 3 quick pictures in a row, for example, 3 quick shots at a sporting event.</p> <p>Select the Continuous Snap Shot LCD reading. Press the Shutter Button, the camera will automatically take 3 quick pictures.</p>
<p>LO</p> What to do:	<p>Hi/LO Quality: The next icon after Continuous Snap Shot is the Hi/Lo Quality icon. If you move to the next icon after Hi/Lo Quality, either the LO icon will appear, meaning that the camera is in LO mode. If no icon shows, then the camera is in Hi mode.</p> <p>Hi Quality is for full resolution while LO quality is for 50% resolution. Press the Mode Button to change the mode, and press the Shutter Button to select mode.</p>
 What to do:	<p>AVI: Auto Video Impression mode for shooting video. AVI frame rate is about 9 Feet Per Second. Press the Shutter Button to stop shooting in AVI mode.</p> <p>Select the Video mode to shoot video. Press the Shutter Button to capture continuous images. These will be stored in the memory until the Shutter Button is released. Note that shooting video will use memory but the picture number will only increase by one.</p>
<p>50 60</p> What to do:	<p>Power Frequency: 60 is for 60 Hz and 50 for 50 Hz.</p> <p>Use the Mode Button to change to the desired frequency. Press the Shutter Button to confirm the power frequency. If a flicker effect occurs while using the Camera, changing the power frequency will eliminate the flickering.</p>
 What to do:	<p>Delete Last/Delete All: The icon with an open trash can lid indicates that the last picture will be deleted. The open trash can lid with the words "ALL" indicate that all pictures in memory will be deleted.</p> <p>When you wish to get rid of the last picture taken, select the icon with the open trash can lid and no words. The icon with the open trash can and the word "ALL" will delete all of your pictures if selected. Note that when the Camera memory is full the LCD will display "FULL" and you cannot take any more pictures. If this occurs, <u>you must either download your pictures or erase them.</u></p>
 What to do:	<p>Battery Status: When your batteries are fully charged, the icon will appear as shown to the left. When your battery charge drops, the Camera will sound a buzzer and only one segment of the Battery Status icon will show. When the battery is completely exhausted, the icon will show as empty. Note that if the battery is not replaced the Camera will automatically turn itself OFF. You will no longer be able to use the Camera without a new battery.</p> <p>Check the Battery Status icon on a regular basis. When you note that the icon is showing only one segment, change the batteries immediately.</p>

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Using as a PC/Web Camera: The LCD will show the text "PC" when you are using it in PC mode. If the memory is full, the text "FUL" will show and the Camera will sound an alarm.

What to do:

Connect the USB cord to the USB port on your PC. The Camera will not function in Camera mode with the USB port plugged in. The LCD will indicate PC.

Downloading and Editing

The Digital Camera and Binocular comes with a program to run ULead[®] Photo Explorer[®] on your computer. Follow all instructions on the CD-ROM to install the program on your computer. Make certain that you follow all instructions in your PC Owner's Manual. Follow all instructions for proper registration of your program.

Connect the USB cord to the USB port on your PC. (See your computer's instruction manual for USB port locations.) The Camera will not function in Camera mode with the USB port plugged in. The LCD will indicate PC.

Once the program is installed and you want to get the images from the Camera's memory you will need to follow some basis steps.

1. Run ULead[®] Photo Explorer[®].
2. Click the "TWAIN Acquire" command from file menu. Select the source as "Dual Mode Camera 8008 VGA+."
3. You will need to select the Device Settings to set the image quality in 50 or 60 Hz. Additionally, you may need to set the Anti-Flicker frequency.
4. Follow the directions that accompany this product and the CD-ROM.

Maintenance

1. Never immerse the Digital Camera in any fluid.
2. Remove dust or stains with a soft cloth lightly dampened with water or special camera cleaning fluids. A special cleaning cloth is included for cleaning lenses.
3. Clean the lenses in circular motions and with as little fluid as possible. Make certain that any cleaning fluid used is approved for use on camera lenses.
4. Avoid using paper products such as paper towels to clean the lenses. These may scratch and damage the lens.
5. Store in a dry location out of the reach of children.

Unpacking

When unpacking your 8 x 22 Digital Camera Binocular, check to make sure the following parts are included. If any parts are missing or broken, please call **HARBOR FREIGHT TOOLS** at **1-800-444-3353**.

Parts List

Part #	Description	Quantity
1	Focus Wheel	1
2	Mode Button	1
3	Shutter Button	1
4	LCD	1
5	Battery Cover	1
6	Battery Compartment	1

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

PLEASE READ THE FOLLOWING CAREFULLY

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Parts Diagram

